

REMARKS

Initially, in the Office Action dated March 16, 2004, the Examiner rejects claims 1-4, 6, 8, 9-12, 14, 16, 17-20, 22, 24 and 25-27 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,665,690 (Kimura et al.). Claims 5, 7, 13, 15, 21 and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kimura et al. in view of U.S. Patent No. 6,014,755 (Wells et al.).

By the present response, Applicants have submitted new claims 28 and 29 for consideration by the Examiner and submit that these claims do not contain any prohibited new matter. Applicants have amended claims 1-4, 7-12, 14-19 and 22-27 to further clarify the invention. Claims 1-29 remain pending in the present application.

35 U.S.C. §102 Rejections

Claims 1-4, 6, 8, 9-12, 14, 16, 17-20, 22, 24 and 25-27 have been rejected under 35 U.S.C. §102(e) as being anticipated by Kimura et al. Applicants respectfully traverse these rejections.

Kimura et al. discloses a recording and reproduction apparatus and method for recording and reproducing different types of data including AV data and PC data on a disc type medium. The type of the recorded data determines the length of recording units used to record the data on the disc. Management information including identification indicating one of the respective types of data is stored at least at two locations of a logical volume.

Regarding claims 1, 8, 9, 16, 17, 24-27 and new claim 28, Applicants submit that Kimura et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, reading a file type information associated with a file to be processed from a recording medium, converting the file type information indicative of a first processing mode to a file type information indicative of a second processing mode, writing the converted file type information in the recording medium as the file management information associated with the file, regarding a file type of a file to be processed as the second processing mode regardless of the file type and reading the data in the second processing mode, or converting the first file type of the data read from the recording medium to the second file type in response to existence of a part of the first file type. The Examiner asserts that Kimura et al. discloses converting a file type from the file type indicative of a first processing mode to a file type indicative of a second processing mode at col. 35, lines 1-7. However, as the Examiner states, this portion of Kimura et al. merely discloses converting PC data into data which can be read by a drive unit. This is not converting a file type information indicative of a first processing mode to a file type information indicative of a second processing mode, as recited in the claims of the present application. Kimura et al. relates to recording and reproducing different types of data including AV data and PC data on a disk type medium where the type of the recorded data determines the length of recording units used to record the data on the disk. These portions of Kimura et al. do not disclose or suggest anything related to a file type information. This portion of Kimura et al. merely discloses converting PC data into a

form that can be read by a drive unit. This has nothing to do with a file type of the data, as recited in the claims of the present application. According to the present invention, it becomes possible to read the whole file even if there is a defective sector 217 within the file. The data reading operation can be performed in an AV-mode regardless of the defection. On the contrary, in a PC-mode, data reading operation stops at a position of a defective sector, as shown in Fig. 2. The data reading operation is then carried out with converting a type of file from the PC-mode to the AV-mode (see page 13, line 1 - page 14, line 20 and Figs. 3 and 4). In contrast, Kimura et al. discloses both AV data and PC data outputted from the PC, but does not disclose any information on file types. Moreover, the converting operation in Kimura et al. does not relate at all to file type, as recited in the claims of the present application.

The Examiner further asserts that Kimura et al. discloses writing the file type information after the conversion in the recording medium as file management information associated with the file to be processed at col. 33, lines 40-67, and col. 34, lines 1-10. However, this portion of Kimura et al. merely discloses how a defect sector is dealt with and where write and verify operations are performed to confirm that a writing has been performed correctly. A detected defective sector is registered into a defect information table so that it is not used anymore and for data recorded as an allocation extent if a defective sector is detected, a number is placed in an allocation extent record. This portion of Kimura et al. does not disclose or suggest writing a converted file type information in the recording medium as the file

management information associated with the file to be processed, as recited in the claims of the present application. This portion of Kimura et al. merely discloses how to store information regarding a defective sector. This portion of Kimura et al. does not disclose or suggest anything related to file type information or writing converted file type information as file management information, as recited in the claims of the present application.

Regarding claims 2-4, 6, 10-12, 14, 18-20, 22 and new dependent claim 29, Applicants submit that these claims are dependent on one of independent claims 1, 9, 17 and 28 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. For example, Kimura et al. does not disclose or suggest when judging that the data is not stored in the all in sectors of the ECC block, registering in the file management information a remaining sector in which the data of the file to be processed is not stored as a stuffing.

Accordingly, Applicants submit that Kimura et al. does not disclose or suggest the limitations in the combination of each of claims 1-4, 6, 8, 9-12, 14, 16, 17-20, 22, 24, 25-27, 28 and 29 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 Rejections

Claims 5, 7, 13, 15, 21 and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kimura et al. in view of Wells et al. Applicants respectfully traverse these rejections.

Wells et al. discloses monitoring the operations of a flash memory array divided into individually erasable blocks of memory in order to ensure the integrity of data stored in the array in which each read or write operation is verified to detect an error which may have occurred in the operation, including the steps of attempting at least one retry operation whenever an error occurs to determine whether the error is repeatable, marking the block to indicate valid data should be removed from the block if the error is found to be repeatable, removing the valid information from the block if the error is found to be repeatable, and removing a block with a repeatable error from operation.

Applicants submit that these claims are dependent on one of independent claims 1, 9 and 17 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. Applicants submit that Wells et al. does not overcome the substantial defects noted previously regarding Kimura et al. For example, Applicants submit that none of the cited references disclose or suggest writing the data in an original recording area where the data would have been written without the replacement processing wherein the replacement processing and the reading step and writing step are carried out on a basis of an ECC block including N recording units (N: positive integer) termed as sectors.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 5, 7, 13, 15, 21 and 23 of the present application.

Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-29 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 500.40610X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Frederick D. Bailey
Registration No. 42,282

FDB/sdb
(703) 312-6600